



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,864	01/21/2005	Alexis S. R. Ashley	GB 020118	1254
24737 7590 09/02/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER SCHWARTZ, DARREN B				
ART UNIT 2135		PAPER NUMBER		
MAIL DATE 09/02/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,864

Applicant(s)

ASHLEY ET AL.

Examiner

DARREN SCHWARTZ

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. In light of the amendments to claims 4, 7, 8 and 13, the claim objections are withdrawn.
2. Applicant states in Remarks filed 05 August 2008 on page 6 of 8, "Gehring merely discloses re-encrypting messages in a forwarding node of a network, where the messages are not processed between decryption and re-encryption, nor are the re-encrypted messages stored. Therefore, Gehring merely re-encrypts exactly what he decrypts - like a repeater. Although Gehring mentions that the same key may be used for decryption and re-encryption, he does not give any reason for doing so, and in fact, repeatedly teaches that the keys should be different to prevent the forwarding node from eavesdropping on the messages that it forwards."
3. The Examiner has underlined a key statement in the Remarks and it appears applicant's admit to the prior art teaching the same key may be used for decryption and re-encryption.
4. Applicant's argue that the combination of references as applied to claim 1 is improper and there is absolutely nothing in Gehring that teaches or even suggest that using the same keys for decryption and re-encryption would provide for "quickly decrypting and forwarding data" (Remarks, page 6 of 8, lines 12-22).
5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The motivation to combine Saito and Gehring comes from one skilled in the art of securely transmitting data between a plurality of endpoints.

6. The same argument applied to claim 1 is also applicable to claim 9. As such, the 35 U.S.C. 103 rejection of claim 1 and 9 is maintained.

7. Applicant's arguments with regard to the Examiner's use of knowledge in the art and/or "Official Notice" pertaining to claims 5, 6 and 14 are moot in view of new grounds of rejection and no affidavit has been filed in light of those grounds.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 8, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (EP 0715241 A2), hereinafter referred to as Saito, in view of Gehring (U.S. Pat Pub 2002/0116606 A1), hereinafter referred to as Gehring.

Re claim 1: Saito teaches a method of storing a received digital signal which has been encrypted by an encryption key (CW) [first secret key Ks1: col 22, lines 1-4] and

transmitted in encrypted form (Fig 5, elements 44 & 45; col 15, lines 14-21), comprising the steps of: decrypting the signal using a decryption key (CW) [first secret key Ks1] corresponding to the encryption key (Fig 8a, elements 71 & 72; col 3, lines 52-54; col 22, lines 1-4); processing the decrypted signal (Fig 8a, element 73; col 22, lines 8-12; Saito teaches the decrypted data M0 is edited, ergo, processing of data M0); and storing the re-encrypted signal (Fig 8a, elements 75 & 76; col 22, lines 9-14).

However, while Saito teaches re-encrypting the processed signal using "a second" encryption key (col 22, lines 10-12). Saito does not explicitly teach re-encrypting the processed signal using encryption key (CW).

Gehring teaches re-encrypting the processed signal using encryption key (CW) (Fig 5, all elements; ¶45, especially lines 8-9 of right column).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Saito reference to use the same keys for encryption and decryption purposes, as taught by Gehring, for the purpose of quickly decrypting and forwarding data (Gehring: ¶42).

Re claim 3: The combination of Saito and Gehring teaches the decryption key (CW) is the same as the encryption key (CW) (Saito: col 22, lines 1-4).

Re claim 9: Saito teaches a digital signal storage device for storing a digital signal which has been encrypted using an encryption key (CW) and transmitted in encrypted form, the device comprising: decryption means for decrypting the signal using a decryption key [first secret key Ks1] corresponding to the encryption key [first secret key Ks1] (Fig 8a, elements 71 & 72; col 3, lines 52-54; col 22, lines 1-4); means for

processing the decrypted signal (Fig 8a, element 73; col 22, lines 10-12); and means (19) for storing the re-encrypted signal (Fig 8a, elements 75 & 76; col 22, lines 9-14).

However, while Saito teaches re-encrypting the processed signal using “a second” encryption key (col 22, lines 10-12). Saito does not explicitly teach encryption means for re-encrypting the processed signal using the encryption key;

Gehring teaches encryption means for re-encrypting the processed signal using the encryption key (Fig 5, all elements; ¶45, especially lines 8-9 of right column).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Saito reference to use the same keys for encryption and decryption purposes, as taught by Gehring, for the purpose of quickly decrypting and forwarding data (Gehring: ¶42).

Re claims 2 and 10: The combination of Saito and Gehring teaches the step of processing the decrypted signal includes and a storage device, wherein processing means comprises manipulating it to improve storage and/or playback operation (Saito: col 12, lines 17-18; col 21, lines 31-39). Saito teaches that storage is improved by avoiding multimedia deterioration.

Re claim 12: The combination of Saito and Gehring teaches the decryption key (CW) is the same as the encryption key (CW) (Saito: col 22, lines 1-4).

10. Claims 4-8 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (EP 0715241 A2), hereinafter referred to as Saito, in view of Gehring

(U.S. Pat Pub 2002/0116606 A1), hereinafter referred to as Gehring, in further view of Relander et al (U.S. Pat Pub 2002/0066012 A1), hereinafter referred to as Relander.

Re claims 4 and 13: The combination of Saito and Gehring teaches all the limitations of claims 3 and 12 as previously discussed. However, Relander teaches the encryption key is one of a plurality of keys forming a key stream (¶6: lines 1-4 and ¶7: lines 1-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Saito and Gehring to transmit data using shifting/changing keys, as taught by Relander, for the purpose of providing further securing access to the multimedia stream.

Re claims 5 and 14: The combination of Saito, Gehring and Relander teaches delaying the key stream after decrypting the signal and before re-encrypting the processed signal (Relander: ¶8: lines 7-12; page 6, claims 2 and 7).

Re claim 6: The combination of Saito, Gehring and Relander teaches delaying the key stream in dependence on the processing being carried out on the decrypted signal (Relander: ¶6-¶7; page 6, claims 2 and 7).

Re claim 7: The combination of Saito, Gehring and Relander teaches the digital signal comprises a stream of transport packets (Relander: ¶8).

Re claim 8: The combination of Saito, Gehring and Relander teaches the step of processing the decrypted signal, wherein performing the operations of Packet Identification Number (PID) remapping, remultiplexing or transcoding (Relander: ¶10).

11. Claims 4 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (EP 0715241 A2), hereinafter referred to as Saito, in view of Gehring (U.S. Pat Pub 2002/0116606 A1), hereinafter referred to as Gehring, in further view of Perlman (U.S. Pat Pub 2002/0184506 A1), hereinafter referred to as Perlman.

Re claim 4: Saito in view of Gehring teaches all the limitations of claim 3 as previously stated above.

However, Perlman teaches the encryption key is one of a plurality of keys forming a key stream (§59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the combination of Saito and Gehring reference to transmit multimedia using shifting/changing keys, as taught by Perlman, for the purpose of providing further securing access to the multimedia stream.

Re claim 11: The combination of Saito and Gehring teaches all the limitations of claim 10 as previously discussed.

However, Perlman teaches the processing means comprises means for performing the operations of Packet Identification Number (PID) remapping, remultiplexing and/or transcoding (Fig 5, element 501 & 502; §42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the combination of Saito and Gehring references to use PID streaming techniques, as taught by Perlman, for the purpose of providing expedient multiplexing and deciphering of a plurality of data streams.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARREN SCHWARTZ whose telephone number is (571)270-3850. The examiner can normally be reached on 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571)272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S./
Examiner, Art Unit 2135
/KimYen Vu/
Supervisory Patent Examiner, Art Unit 2135